LESSON 9.2

NAME _____ DATE _____

Practice B

For use with pages 511–516

Match the radical expression with its simplified form.

A. $5\sqrt{2}$ **B.** $4\sqrt{5}$ **C.** $3\sqrt{2}$ **D.** $7\sqrt{3}$

E. $4\sqrt{7}$ **F.** $6\sqrt{2}$ **G.** $6\sqrt{3}$ **H.** $5\sqrt{5}$

1. $\sqrt{108}$ **2.** $\sqrt{72}$ **3.** $\sqrt{147}$ **4.** $\sqrt{80}$

5. $\sqrt{18}$ **6.** $\sqrt{112}$ **7.** $\sqrt{125}$ **8.** $\sqrt{50}$

Use the product property to simplify the expression.

9. $\sqrt{50}$ **10.** $\sqrt{20}$ **11.** $\sqrt{240}$ **12.** $\sqrt{108}$

13. $\sqrt{300}$ **14.** $\sqrt{3} \cdot \sqrt{12}$ **15.** $\frac{1}{3}\sqrt{45}$ **16.** $\frac{1}{2}\sqrt{128}$

Use the quotient property to simplify the expression.

17. $\sqrt{\frac{16}{25}}$ **18.** $\sqrt{\frac{1}{9}}$ **19.** $7\sqrt{\frac{3}{16}}$ **20.** $5\sqrt{\frac{20}{49}}$

21. $2\sqrt{\frac{15}{3}}$ **22.** $\frac{\sqrt{40}}{14}$ **23.** $10\sqrt{\frac{20}{64}}$ **24.** $\sqrt{\frac{9}{81}}$

Simplify the expression.

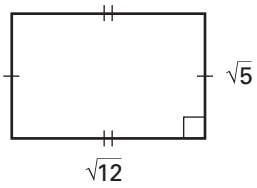
25. $\frac{\sqrt{28}}{\sqrt{49}}$ **26.** $\sqrt{\frac{12}{16}}$ **27.** $\frac{\sqrt{64}}{\sqrt{4}}$ **28.** $\frac{\sqrt{9}}{\sqrt{81}}$

29. $\frac{\sqrt{56}}{\sqrt{36}}$ **30.** $\frac{\sqrt{112}}{\sqrt{100}}$ **31.** $2\sqrt{42} \cdot \sqrt{9}$ **32.** $\frac{1}{3}\sqrt{18} \cdot \sqrt{3}$

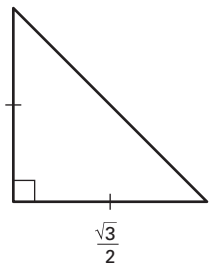
33. $\sqrt{3} \cdot \frac{\sqrt{20}}{\sqrt{5}}$ **34.** $8\sqrt{27} \cdot \sqrt{72}$ **35.** $\frac{\sqrt{6} \cdot \sqrt{36}}{\sqrt{2}}$ **36.** $\frac{-4 \cdot \sqrt{45}}{\sqrt{144}}$

Geometry **Find the area of the figure. Give both the exact answer in simplified form and the decimal approximation rounded to the nearest hundredth.**

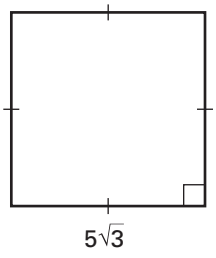
37.



38.



39.



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